

AMENDMENT AND STATEMENT OF SUBSTANCE OF INTERVIEW
U.S. Appln. No. 10/689,543

REMARKS

Claims 12-15 are all the claims pending in the application.

Amended Claim 12 is supported by the description in the specification as originally filed, including, for example, page 4, lines 6-7, and Example 3.

No new matter has been added.

Counsel for Applicants wishes to thank the examiner for the opportunity to conduct an interview on January 24, 2006. The Interview Summary (Form PTOL-413) accurately reflects the discussions that took place during the interview. Also, it is believed that the interview has materially advanced the prosecution of this application. The Statement of Substance of Interview is as follows:

- (A) No exhibit was shown nor was a demonstration conducted.
- (B) Independent Claim 12 was discussed.
- (C) U.S. Patent No. 5,866,645 ("Pinnavaia") was generally discussed, insofar as it represents the art of record, which discloses intercalation but does not disclose bridging.
- (D) The examiner suggested amending the claims to clarify that the claimed bridged clay has adjacent lamellae connected together with the help of a metal compound, and the metal compound has a chemical link with each of the lamellae.
- (E) The general thrust of the principal argument was that the term "bridged" speaks for itself. A person of ordinary skill in the art reading the term "bridged" understands that bridging is distinct from Pinnavaia's disclosure of intercalating with an inorganic metal precursor.
- (F) No other pertinent matter was discussed.
- (G) The examiner agreed to reconsider the rejection below.

In particular, Claims 12-15 are rejected under 35 U.S.C. § 102(b) as being anticipated by Pinnavaia.

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Applicants respectfully traverse.

Pinnavaia does not disclose the subject matter of Claims 12-15 such that Pinnavaia cannot anticipate Claims 12-15. Pinnavaia discloses only an intercalated clay. That is, the clay component of Pinnavaia is intercalated with an inorganic metal precursor. Pinnavaia does not disclose the claimed preparation of a bridged clay.

The bridged clay of Claim 12 is a clay in which its two adjacent lamellae are connected together with the help of the claimed metal compound, the latter having a chemical link with each of these lamellae. As understood by one of ordinary skill in the art, a chemical link is strong and irreversible. Thus, for obtaining the bridged clay of Claim 12, a metal compound is inserted between the lamellae and bound chemically with them. A distinction between bridging and intercalating is that intercalating does not comprise the "chemical link" aspect of bridging. This distinction between bridging and intercalating is captured and reflected by use of the term "bridged" in Claim 12.

In this regard, the term "bridged" speaks for itself. A person of ordinary skill in the art reading the term "bridged" in Claim 12 does not need to be told the conditions necessary to achieve bridging.

However, in order to advance the prosecution, Applicants have further clarified that the claimed clay is a bridged clay by amending Claim 12 to recite a step of preparing the bridged clay by a process comprising heat treatment.

As an example of the claimed process comprising heat treatment, Applicants refer to Example 3 at pages 7 and 8. Starting from a metal compound in hydroxide state, an appropriate heat treatment (in this case, 300 °C for 3 hours) serves to form a metal compound in an oxide state and hence to create conditions of the formation of chemical links involved in bridging. Pinnavaia does not disclose the preparation of a bridged clay, and Pinnavaia does not disclose the conditions needed to bridge, as, for example, no appropriate heat treatment is disclosed.

Thus, although in both Pinnavaia and the present process, a polymer component may be mixed with a treated clay, only in the present process is the treated clay a bridged clay. As

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explained at page 2, lines 33-35, of the specification, and as recited in Claim 12, the bridged clay facilitates intercalation of an organic compound.

Finally, Applicants would once more like to emphasize that the present application is a divisional of application serial no. 09/866,836, which is now U.S. Patent No. 6,674,009. The claims of the '009 Patent are directed to a composition of a bridged clay. Accordingly, the present divisional application, containing claims drawn to the process for obtaining the patented composition, should also pass to issue.

Indeed, present Claims 12-15 were improperly canceled by an Examiner's Amendment attached to the Notice of Allowability mailed with the Notice of Allowance on July 2, 2003, in the parent application. Claims 12-15 were improperly canceled because where an applicant elects claims directed to a product, and a product claim is subsequently found allowable, withdrawn process claims which depend from or otherwise include all the limitations of the allowable product claim are supposed to be rejoined. The improper cancellation in the parent application caused Applicants to have to file the present divisional application.

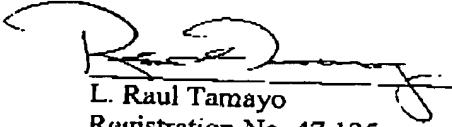
For the foregoing reasons, and the reasons of record, Applicants request reconsideration and withdrawal of the §102 rejection of Claims 12-15.

Reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



L. Raul Tamayo
Registration No. 47,125

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: February 2, 2006

CERTIFICATION OF FACSIMILE TRANSMISSION

Sir:

I hereby certify that the above identified correspondence is being facsimile transmitted to Examiner Tae H. YOON at the Patent and Trademark Office on February 2, 2006, at (571) 273-8300.

Respectfully submitted,

L. Raul Tamayo